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| 10/829,154 | 04/22/2004 | Takashi Aketa | 0171-1087PUS1 | 5733 |
| 2292 7590 10/31/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | EXAMINER FISCHER, JUSTIN R | |
| | | | ART UNIT 1791 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/829,154 | Applicant(s) AKETA ET AL. | |
| | Examiner Justin R. Fischer | Art Unit 1791 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>91407</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the APA and further in view of Fujiki (US 5,438,094, newly cited), Simizu (US '140, of record), and Takuman (EP 1225211, of record).

The APA discloses a method of preparing an air bag, said method comprising: furnishing a pair of base fabric pieces impregnated and/or coated with silicone rubber, laying the pieces one on the other with the coated surfaces of the pieces inside, and bonding or stitching peripheral portions of the pieces together to form a bag (Page 1, Lines 17-22). In this instance, though, the APA fails to disclose the use of the claimed adhesive silicone rubber composition. Fujiki, on the other hand, discloses the claimed adhesive silicone rubber composition and suggests that it has a high degree of adherence to metals and additional resins (can be viewed as including rubbers). It is particularly noted that Fujiki suggests an adhesive composition comprising a filler in the form of, for example, alumina, silica, and/or carbon black (Column 9, Lines 1-10). One of ordinary skill in the art at the time of the invention would have recognized such language as including embodiments in which only alumina is used and embodiments in which alumina, carbon black, and/or silica are used. Absent any conclusive showing of

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unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use the claimed silicone adhesive composition in the bonding method of the APA, in view of Fujiki.

As to the “alumina” component of Fujiki, while the reference fails to expressly describe the component as an “aluminum hydroxide powder”, such an inorganic filler is conventionally used in adhesives as a powder, as shown for example by Simizu (Column 4). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include the aluminum hydroxide as a powder

Lastly, with respect to the independent claim, one of ordinary skill in the art at the time of the invention would have expected the adhesive silicone rubber compositions of Fujiki to demonstrate the claimed elongation in view of Takuman (Table 1). In this instance, a plurality of extremely similar adhesive silicone rubber compositions (inventive and comparative examples) has an elongation at break above 1000 %.

Regarding claim 2, Takuman discloses a method wherein the aluminum hydroxide has been surface treated with a surface treating agent selected from the group comprising fatty acids, resin acids or organosilazanes and alkoxysilanes (Page 4, Lines 30-31). One of ordinary skill in the art at the time of the invention would have found it obvious to perform such a treatment with the adhesive silicone rubber composition of Fujiki.

As to claim 3, the claimed range is consistent with the dimensions of aluminum hydroxide powder used in adhesive compositions, as shown for example by Simizu

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(Column 4, Lines 44-45). It is further noted that the claimed particle sizes, as suggested by Simizu, result in a smooth surface and appearance after curing.

With respect to claim 11 and 18, as noted above, the disclosure of Fujiki includes embodiments in which the only inorganic filler is aluminum hydroxide. In this instance, applicant has not provided a conclusive showing of unexpected results to establish a criticality for a composition in which aluminum hydroxide powder is the sole inorganic filler (Table 1 simply compares compositions with and without alumina hydroxide powder).

Regarding claims 12-17, one of ordinary skill in the art at the time of the invention would have recognized the broad range of the claimed invention as being consistent with the loadings conventionally used with additives, including inorganic fillers. Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include aluminum hydroxide powder in accordance to the claimed invention.

As to claim 19, the adhesive silicone rubber composition of Fujiki includes silicon atom-bonded hydrogen atoms in accordance to the claimed invention (Column 4, Lines 35-45). Additionally, (a) the platinum catalyst is included at a loading between 0.1 and 1,000 parts by weight of platinum group metal per million parts by weight of the composition and (b) the filler is included at a loading between 10 and 150 parts by weight of the organopolysiloxane (Column 9, Lines 10-20).

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3. Claims 1-7 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the APA and further in view of Tsuji (EP 764702, newly cited), Takuman, and Simizu.

The APA discloses a method of preparing an air bag, said method comprising: furnishing a pair of base fabric pieces impregnated and/or coated with silicone rubber, laying the pieces one on the other with the coated surfaces of the pieces inside, and bonding or stitching peripheral portions of the pieces together to form a bag (Page 1, Lines 17-22). In this instance, though, the APA fails to disclose the use of the claimed adhesive silicone rubber composition. Tsuji, on the other hand, discloses the use of a liquid silicone rubber composition that satisfies the claimed adhesive composition and is described as providing high adhesive properties (Abstract, Page 2, Lines 1-50). One of ordinary skill in the art at the time of the invention would have found it obvious to use the liquid silicone rubber composition of Tsuji in the method of the APA. It is emphasized that such liquid silicone rubber compositions are conventionally used in a wide variety of applications, including adhesives, sealing materials, potting materials, coating materials, etc. In this instance, one of ordinary skill in the art at the time of the invention would have found it obvious to use the liquid silicone rubber composition of Tsuji in the bonding method of the APA.

As to the filler, the composition of Tsuji can include a wide variety of fillers, including silica and aluminum oxide (Page 3, Lines 10-20). One of ordinary skill in the art at the time of the invention would have recognized such language as including embodiments in which only alumina oxide is used and embodiments in which alumina

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oxide and/or silica are used. Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use the claimed silicone adhesive composition in the bonding method of the APA, in view of Fujiki. Also, while Tsuji fails to expressly describe the use of aluminum hydroxide powder, such an inorganic filler is conventionally used in adhesives as a powder, as shown for example by Simizu (Column 4). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include the aluminum hydroxide as a powder

Lastly, with respect to the independent claim, one of ordinary skill in the art at the time of the invention would have expected the adhesive silicone rubber compositions of Fujiki to demonstrate the claimed elongation in view of Takuman (Table 1). In this instance, a plurality of extremely similar adhesive silicone rubber compositions (inventive and comparative examples) has an elongation at break above 1000%. It is further noted that Takuman recognizes the known use of similar liquid silicone rubber compositions in a wide variety of applications, including coatings and adhesives (Paragraph 2).

Regarding claim 2, the method of Tsuji involves surface treating the respective fillers (Page 3, Lines 15-20).

As to claim 3, the claimed range is consistent with the dimensions of aluminum hydroxide powder used in adhesive compositions, as shown for example by Simizu (Column 4, Lines 44-45). It is further noted that the claimed particle sizes, as suggested by Simizu, result in a smooth surface and appearance after curing.

With respect to claim 4, the composition of Tsuji includes an organopolysiloxane (component B) (Page 3, Lines 1-7).

Regarding claim 5 (dependent from claim 4), the composition of Tsuji is described as including a treated filler. The reference specifically teaches the use of organosilicon compounds for such a treatment, including organosilanes (Page 3, Lines 15-20). While the reference fails to expressly suggest the use of organoalkoxysilanes, such additives are a specific type of organosilane that are commonly used in treating fillers, as shown for example by Takuman (Paragraph 18). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include an organoalkoxysilane in the composition of Tsuji.

As to claims 6 and 7, the composition of Tsuji includes an organic titanium compound (component G).

With respect to claim 11 and 18, as noted above, the disclosure of Tsuji includes embodiments in which the only inorganic filler is aluminum hydroxide. In this instance, applicant has not provided a conclusive showing of unexpected results to establish a criticality for a composition in which aluminum hydroxide powder is the sole inorganic filler (Table 1 simply compares compositions with and without alumina hydroxide powder).

Regarding claims 12-17, one of ordinary skill in the art at the time of the invention would have recognized the broad range of the claimed invention as being consistent with the loadings conventionally used with additives, including inorganic fillers. Absent

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any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include aluminum hydroxide powder in accordance to the claimed invention.

As to claim 19, the adhesive silicone rubber composition of Tsuji includes silicon atom-bonded hydrogen atoms in accordance to the claimed invention (Page 1, Lines 35-38). Additionally, (a) the platinum catalyst is included at a loading between 0.1 and 500 parts by weight of platinum group metal per million parts by weight of the composition and (b) the filler is included at a loading between 5 and 100 parts by weight of the organopolysiloxane (Page 1, Lines 32-35).

With respect to claim 20, the organopolysiloxane is included at a loading between 5 and 100 phr and the organohydrogenpolysiloxane is blended in such an amount that 0.6-20 moles of silicon-bonded hydrogen in the organohydrogenpolysiloxane are present per mole of alkenyl radicals in the organopolysiloxane. One of ordinary skill in the art at the time of the invention would expect the composition of Tsuji to satisfy the claimed range even if it is based on the combination of moles in components (i) and (v) of the claimed invention (as currently drafted, claims define the number of moles in component (i) and the inorganic filler).

Response to Arguments

4. Applicant's arguments with respect to claims 1-7 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Justin R Fischer
Primary Examiner
Art Unit 1791

JRF
October 23, 2007